

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

Deadhorse Creek Weir<sup>1</sup>

NAME OF RESERVOIR

U.S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

63-18

DATA SHEET NO.

DAM	1. OWNER <u>USDA - F.S.</u>			2. STREAM <u>Deadhorse Creek</u>			3. STATE <u>Colorado</u>								
	4. SEC. <u>TWP.</u> <u>RANGE</u>			5. NEAREST P.O. <u>Fraser, Colo.</u>			6. COUNTY <u>Grand</u>								
	7. LAT. <u>39° 54'</u> " LONG. <u>105° 53'</u> "			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.								
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, <del>XXXXX</del>		13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN				
	a. FLOOD CONTROL										16. DATE NORMAL OPER. BEGAN      <b>10-1-54</b>				
	b. MULTIPLE USE														
	c. POWER														
	d. WATER SUPPLY														
	e. IRRIGATION														
	f. CONSERVATION														
	g. INACTIVE		<u>N.A.<sup>2</sup></u>		<u>408 Ft<sup>2</sup></u>										
17. LENGTH OF RESERVOIR _____ MILES, AV. WIDTH OF RESERVOIR _____ MILES															
WATERSHED	18. TOTAL DRAINAGE AREA <u>1.04</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION (9) <u>17.58<sup>3</sup></u> INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA <u>1.04</u> SQ. MI.				23. MEAN ANNUAL RUNOFF (15) <u>11.85<sup>4</sup></u> INCHES										
	20. LENGTH <u>2</u> MILES		AV. WIDTH <u>0.5</u> MILES		24. MEAN ANNUAL RUNOFF (15) <u>658.66<sup>4</sup></u> AC.-FT.										
	21. MAX. ELEV. <u>11,584 Ft.</u>				MIN. ELEV. <u>9,450 Ft.</u>		25. ANNUAL TEMP: MEAN <u>33° F</u> RANGE <u>35° F.<sup>3</sup></u>								
SURVEY DATA	26. DATE OF SURVEY <u>5</u>		27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA, ACRES		32. CAPACITY, ACRE-FEET		33. C/I. RATIO, AC.-FT. PER AC.-FT.		
	<u>10-1-55</u>		<u>1</u>	<u>1</u>	↑ See Remark <sup>5</sup> ↓										
	<u>10-1-56</u>		<u>1</u>	<u>2</u>											
	<u>10-1-57</u>		<u>1</u>	<u>3</u>											
	<u>10-1-58</u>		<u>1</u>	<u>4</u>											
	<u>10-1-59</u>		<u>1</u>	<u>5</u>											
	<u>10-1-60</u>		<u>1</u>	<u>6</u>											
	(continued on next page)														
	26. DATE OF SURVEY <u>5</u>		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET				36. WATER INFL. TO DATE, AC.-FT.						
					a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE		
	<u>10-1-56</u>		<u>24.75<sup>3</sup></u>		<u>712.18<sup>4</sup></u>										
	<u>10-1-57</u>		<u>32.78</u>		<u>1079.67</u>										
<u>10-1-64</u>		<u>18.16</u>		<u>466.40</u>											
<u>10-1-65</u>		<u>26.45</u>		<u>745.42</u>											
<u>10-1-66</u>		<u>16.76</u>		<u>352.07</u>											
(continued on next page)															
26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-FEET						38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET							
		a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR			
<u>10-1-55</u>						<u>131 Ft<sup>3</sup>/MI<sup>2</sup></u>		<u>.003</u>							
<u>10-1-56</u>						<u>544</u>		<u>.012</u>							
<u>10-1-57</u>						<u>718</u>		<u>.016</u>							
<u>10-1-58</u>						<u>266</u>		<u>.006</u>							
<u>10-1-59</u>						<u>157</u>		<u>.004</u>							
(continued on next page)															
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM							
				a. PERIOD		b. TOTAL TO DATE		a. AV. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE	
<u>10-1-55</u>				<u>6.40</u>		<u>6.40</u>									
<u>10-1-56</u>				<u>26.88</u>		<u>16.64</u>									
<u>10-1-57</u>				<u>35.52</u>		<u>22.93</u>									
<u>10-1-58</u>				<u>3.20</u>		<u>18.00</u>									
<u>10-1-59</u>				<u>7.68</u>		<u>15.94</u>									
(continued on next page)															

49 AGENCY SUPPLYING DATA Same SO. DATE 8/1/71

48 AGENCY MAKING SURVEY Rocky Mt. Forest and Range Exp. Station

1 Leaf, Charles F. 1970. Sediment yields from central Colorado snow zone. J. Hydraul. Div., Amer. Soc. Civil Eng., 96(HY1): 87-93.  
 2 Entire pond used to collect bedload sediment and debris.  
 3 Records collected at Fraser Experimental Forest Headquarters (El. 9,070 ft.).  
 4 April-Sept. Runoff.  
 5 Pond surveyed every fall by cross-sectioning (Tabulation is in Ft.  $\frac{3}{8}$ M.  $\frac{2}{2}$ ).  
 6 Leaf, Charles F. 1971. Closure, Sediment yields from central Colorado snow zone. J. Hydraul. Div., Amer. Soc. Civil Eng., 97(HY2): 350-351.

47 REMARKS AND REFERENCES

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

46 ELEVATION-AREA-CAPACITY DATA

WATER YEAR	MAX ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.

45 RANGE IN RESERVOIR OPERATION

REACH DESIGNATION	PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION

44 PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION

26. DATE OF SURVEY	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125

43 PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION

26. DATE OF SURVEY	DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION

CONTINUATION SHEET 1

26. Date of Survey	27. Period Years	28. Accl. Years	29. Type of Survey
10-1-61	1	7	
10-1-62	1	8	
10-1-63	1	9	
10-1-64	1	10	
10-1-65	1	11	
10-1-66	1	12	
10-1-67	1	13	
10-1-68	1	14	
10-1-69	1	15	
10-1-70	1	16	

  

26. Date of Survey	34. Period Annual Precip.	35. Period Water Flow, A/F a. Mean Annual b. Max. Annual
10-1-67	22.35	560.83
10-1-68	18.87	519.50
10-1-69	25.18	678.52
10-1-70	25.69	897.65

*More Space*

  

26. Date of Survey	37. Period Capacity Loss		
	a. Period Total	b. Av. Annual	c. Per Sq. Mi.
10-1-60			157
10-1-61			32
10-1-62			403
10-1-63			29
10-1-64			47
10-1-65			223
10-1-66			23
10-1-67			16
10-1-68			35
10-1-69			67
10-1-70			207

*NO. 12-yr*

CONTINUATION SHEET 2

26. Date of Survey	39. Av. Dry Wgt., Lbs./Cu.Ft.	40. Sed.Dep., Tons/Sq.Mi. a. Period    b. Total to Date	
10-1-60		7.68	14.56
10-1-61		1.60	12.71
10-1-62	103.5 <sup>6</sup>	19.84	13.60
10-1-63		1.28	12.23
10-1-64		2.24	11.23
10-1-65		11.20	11.23
10-1-66		1.28	10.40
10-1-67		0.83	9.66
10-1-68		1.81	9.10
10-1-69		3.46	8.73
10-1-70		10.71	9.44

26. Date of Survey	27. Period Years	28. Accl. Years	29. Type of Survey
1971	1	17	
1972	1	18	
1973	1	19	
1974	1	20	
1975	1	21	
1976	1	22	
1977	1	23	
1978	1	24	
1979	1	25	
1980	1	26	

26. Date of Survey	34. Period Annual Precip.	35. Period Water Flow, A/F	
		a. Mean Annual	b. Max. Annual
1971	22.20	961.	
1972	25.03	636.	
1973	23.47	703.	
1974	22.24	778.	
1975	19.36	632.	
1976	18.24	397.	
1977	24.50	294.	
1978	17.60	852.	
1979	22.90	609.	
1980	26.33	656.	

26. Date of Survey	37. Period Capacity Loss		
	a. Period Total	b. Av. Annual	c. Per Sq. Mi.
1971			396.
1972			83.
1973			82.
1974			86.
1975			55.
1976			6.
1977			0.
1978			200.
1979			47.
1980			110.
			43.

---

26. Date of Survey	39. Av. Dry Wgt., Lbs./Cu. Ft.	40. Sed. Dep., Tons/Sq. Mi.	
		a. Period	b. Total to Date
9/9/71	103.5 lbs.	20.50	
8/29/72		4.27	
9/13/73		4.26	
8/21/74		4.47	
9/3/75		2.86	
9/9/76		.30	
9/7/77		.0	
10/24/78		10.30	
9/5/79		2.44	
10/2/80		5.68	

---